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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,219	01/15/2002	Andrew Philip Churchill	CAF-29302/03	2624

25006 7590 12/02/2003

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EXAMINER

BOMAR, THOMAS S

ART UNIT PAPER NUMBER

3672

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,219

Applicant(s)

CHURCHILL, ANDREW PHILIP

Examiner

Shane Bomar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47-63 is/are allowed.
- 6) ☒ Claim(s) 36-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Drawings

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

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Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 36-38 and 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Bourgoyne, Jr.

Regarding claim 36, Bourgoyne discloses in Figs. 11-13 a downhole bypass tool comprising:

- A body adapted to be mounted on a tubular string (see col. 9, lines 43-45) and defining an axial through bore 47 to allow fluid to flow through the body and including a wall defining a fluid port 48 for permitting passage of fluid between the body bore and the exterior of the body (see col. 9, lines 57-61).
- An operating sleeve 41 mounted to the body and normally positioned to close the fluid port.
- An activating device (Fig. 12 or 13) adapted to be dropped through the string to land on the operating sleeve 41 (see col. 9, lines 66-68).
- A flow restriction is seen in the area of elements 56 and 57 in Figs. 12 and 13, or a flow restriction is seen at element 41a of Fig. 11, that is operatively associated with the operating sleeve 41 and located upstream of the port 48, the restriction being configured to create a fluid flow-related force on the operating sleeve for moving the sleeve to open the body port following landing of the activating device (see col. 9, lines 53-60).

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Regarding claim 37, the activating device provides the flow restriction (see Figs. 12 and 13).

Regarding claim 38, a biasing member 46 urges the operating sleeve 41 to close the fluid port 48.

Regarding claim 41, element 41a is a first flow restriction and the second flow restriction is located near elements 56 and 57, both restrictions being located upstream of the port 48.

Regarding claim 42, the activating device is a sleeve having an axial through bore, as can be seen from Figs. 12 or 13.

Regarding claims 43 and 44, activating device 66 is a deformable plug, which is in the form of a ball.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourgoyne, Jr.

Bourgoyne teaches a downhole tool as applied to claim 36. It is not taught that the tool further comprises locking means for retaining the operating sleeve in position to close the fluid port or that the locking means is a coupling that is released upon landing of the activating sleeve onto the operating sleeve.

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Bourgoyne does teach that shear pins 57 releasably lock, or couple, sleeve 56 to body 53 of the activating sleeve (see col. 10, lines 8-10). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to also provide the operating sleeve with pins 57 so that they would fail due to the increased pressure from the landing of the activating sleeve (see col. 10, lines 41-44).

5. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourgoyne in view of US patent 6,173,795 to McGarian et al.

Bourgoyne teaches a downhole tool as applied to claim 36 above. It is not taught that the tool further comprises indexing means for controlling movement of the operating sleeve between the first and second configuration, or that the indexing means includes a cam arrangement.

McGarian et al teach a downhole tool 2 that comprises an indexing means 53, 55 (see Figs. 1A, 2A, and 3A) that is a cam arrangement for controlling the movement of an operating sleeve 24 and configured to permit the sleeve 24 to be retained in one of the port 16 open and port closing positions (see Fig. 2 and 3) while fluid flow through the tool is maintained at a normal operational level (see col. 1, line 38 through col. 2, line 5). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide Bourgoyne's downhole tool with the indexing means taught by McGarian et al. One would have been motivated to make this combination so that the tool would be capable of being reset many times while remaining downhole (see col. 1, lines 38-40 of '795).

Allowable Subject Matter

6. Claims 47-63 are allowed.

Response to Arguments

7. Applicant's arguments, see pages 12-14, filed 22 September 2003, with respect to claims 47-59 have been fully considered and are persuasive. The rejection of claims 47-59 has been withdrawn.

8. Applicant's arguments filed 22 September 2003, with respect to claims 36-46, have been fully considered but they are not persuasive. Independent claim 36 appears to encompass several embodiments of the claimed invention, including the embodiment of Figure 2. Based on the description of Figure 2 on pages 16-18 of the specification, the office can find no difference between the operation of the bypass tool taught by Bourgoyne and the bypass tool embodied by Figure 2. The applicant argues that the beveled surface 41a of sleeve 41 disclosed by the Bourgoyne reference cannot serve as a flow restriction (see the middle paragraph on page 12 of the applicant's response). Again, the office refers to the embodiment of Figure 2 where the flow restriction 164 is seen as a beveled surface that is a seat for activating device 166, and wherein the activating device is the recipient of the flow related force and transmits that force to the bypass sleeve upon engagement of the activating device with the flow restriction (see page 17, lines 10-17 of the specification). As noted in the above rejection of claim 36, this is also how the bypass tool of Bourgoyne operates.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Whiteley et al teach a dropped activating device for engaging an operating sleeve with a flow restriction (see Figs. 2E, 3, and 10A).

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10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

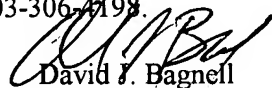
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 703-305-4849. The examiner can normally be reached on Monday - Thursday from 7:00am to 4:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4198.

tsb

November 18, 2003



David J. Bagnell
Supervisory Patent Examiner
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